

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference | FOR FURTHER ACTION | See Notificatio | n of Transmittal of International tamination Report (Form PCT/IPEA/416) |
|---|--|--------------------|--|
| PU020269 International application No. | International filing date (day/m | onth/year) | Priority date (day/month/year) |
| international application No. | | | 04 June 2002 (04.06.2002) |
| PCT/US03/17369 | 03 June 2003 (03.06.2003) | , _ | 04 June 2002 (04:00:2002) |
| International Patent Classification (IPC) | | | |
| IPC(7): H04B 1/16, 1/06, 7/00 and US | Cl.: 455/131, 136, 151.2, 164.1, | , 205, 240.1, 260, | 295, 296, 3.03, 3.06, |
| Applicant | • | | |
| THOMSON LICENSING S.A. | | | |
| This international preliming Examining Authority and | is transmitted to the applicant | according to At | |
| 2. This REPORT consists of | a total of sheets, including | ng this cover shee | et. |
| | | ic report and/or ! | description, claims and/or drawings sheets containing rectifications made inistrative Instructions under the PCT). |
| These annexes consist of | These annexes consist of a total of sheets. | | |
| 3. This report contains indic | ations relating to the following | ng items: | |
| I Basis of the re | port | | |
| II Priority | | • | |
| III Non-establishn | nent of report with regard to | novelty, inventive | e step and industrial applicability |
| IV Lack of unity | | | |
| | | h regard to novel | ty, inventive step or industrial |
| applicability; o | itations and explanations sup | porting such state | ement |
| VI Certain docum | | | |
| | The state of the S | | |
| | ations on the international ap | | |
| | | | |
| Date of submission of the demand | D | ate of completion | n of this report |
| Date of Shormssion of the Continue | | , | |
| 30 December 2003 (30.12.2003) | 20 | July 2004 (20.07 | .2004) |
| Name and mailing address of the IPEA | /US A | athorized officer | mentifices |
| Mail Stop PCT, Attn: IPEA/US Commissioner for Patents | | Edan Orgad | // .0 ' / |
| P.O. Box 1450 | | • | 205 4222 |
| Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 | T | elephone No. 703 | -3UJ-4 <i>LL</i> 3 |

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| PCT/US0 | 3/17: | 369 |

| T. | Basi | is of the report |
|-----|-------------|--|
| | | regard to the elements of the international application:* |
| ••• | X | the international application as originally filed. |
| | | the description: |
| | | pages 1-4 as originally filed |
| | | pages NONE , filed with the demand |
| | | pages NONE, filed with the letter of |
| | X | the claims: |
| | | pages 5 and 6 , as originally filed |
| | | pages NONE, as amended (together with any statement) under Article 19 |
| | | pages NONE, filed with the demand pages NONE, filed with the letter of |
| | | |
| | \boxtimes | the drawings: |
| | | pages 1-2, as originally filed pages NONE, filed with the demand |
| | | pages NONE , filed with the letter of |
| | | |
| | لــا | the sequence listing part of the description: |
| | | pages NONE, as originally filed, filed with the demand |
| | | pages NONE filed with the letter of |
| 2 | Wit | b regard to the language, all the elements marked above were available or furnished to this Authority in the |
| | lano | uage in which the international application was filed, unless otherwise indicated under this item. |
| | The | se elements were available or furnished to this Authority in the following language which is. |
| | | the language of a translation furnished for the purposes of international search (under Rule23.1(b)). |
| | | the language of publication of the international application (under Rule 48.3(b)). |
| | | the language of the translation furnished for the purposes of international preliminary examination (under Rules |
| | | 55.2 and/or 55.3). |
| 3. | Wit | h regard to any nucleotide and/or amino acid sequence disclosed in the international application, the |
| | inte | rnational preliminary examination was carried out on the basis of the sequence listing: |
| | L | contained in the international application in printed form. |
| | | filed together with the international application in computer readable form. |
| | | furnished subsequently to this Authority in written form. |
| | | furnished subsequently to this Authority in computer readable form. |
| | | The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the |
| | | international application as filed has been furnished. |
| | | The statement that the information recorded in computer readable form is identical to the written sequence listing |
| | - | has been furnished. |
| 4. | | The amendments have resulted in the cancellation of: |
| | • | the description, pages NONE |
| | | the claims, Nos. NONE |
| | | the drawings, sheets/fig NONE |
| _ | Γ | |
| 5. | | This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** |
| 16 | ic ran | acement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to it ort as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). replacement sheet containing such amendments must be referred to under item 1 and annexed to this report. |
| | | |

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International application No. PCT/US03/17369

| V. Reasoned statement under Rule 66.2(a)(i citations and explanations supporting suc | ii) with regar ch statement | d to novelty, inventive step or indu | strial applicability; |
|--|--------------------------------|--------------------------------------|-----------------------|
| 1. STATEMENT | - | | |
| Novelty (N) | Claims | 1-17 NONE | YES NO |
| Inventive Step (IS) | | 2, 7-11 and 13 | YES |
| | Claims | 1, 3-6, 12 and 14-17 | NO |
| Industrial Applicability (IA) | Claims Claims | 1-17 NONE | YES NO |
| 2. CITATIONS AND EXPLANATIONS Please See Continuation Sheet | | | |
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International application No. PCT/US03/17369

| Supplemental Box | |
|---|---|
| (To be used when the space in any of the preceding boxes is not sufficient) | |
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V. 2. Citations and Explanations:

Claim 1, 3-6, 12 and 14-17 lack an inventive step under PCT Article 33(3) as being obvious over Hunsinger et al (US 5,850,415) in view of Cashen et al (US 5,878,336).

Regarding claims 1 and 12, Hunsinger teaches a receiver for receiving an audio file signal (abstract) a decoder for demodulating said audio file signal (fig. 16, element 286). However, Hunsinger fails to teach a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal. However, in the same field of endeavor, Cashen teaches a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal (col. 3, lines 11-37). Therefore, it would have been obvious to combine Cashen's teachings of a processor for polling said decoder for a loss of a phase lock in said demodulating of said audio file signal with Hunsinger's digital broadcasting system in order to discontinuously operate the receiver in a communication that requires reception and evaluation of data field in their entirety.

Regarding claims 3 and 14, Hunsinger fails to specifically disclose said receiver comprises a 900MHz radio frequency reception circuitry. However, official notice is taken that a receiver comprises a 900MHz radio frequency reception circuitry is very well known. Therefore, it would have been obvious to use a receiver comprising a 900MHz radio frequency reception circuitry with Hunsinger in order to provide the user with a broader range of frequencies.

Regarding claims 4 and 15, Hunsinger fails to specifically disclose said decoder comprises an eight to four modulation EFM decoder. However, official notice is taken that an eight to four modulation EFM decoder is well known in the art. Therefore, it would have been obvious to use an eight to four modulation EFM decoder with Hunsinger's receiver in order to translate the original data into its original format.

Regarding claims 5, 6, 16 and 17, Hunsinger teaches said decoder outputs a digital audio stream (see abstract) but fails to disclose that it conforms to an IS2 audio stream. However, official notice is taken that IS2 audio streams are well known. Therefore, it would have been obvious to use IS2 audio stream with Hunsinger's existing audio stream in order to have 16 bits represent left channel audio samples, and the other 16 bits represent right channel audio Samples.

Claims 2,7-11 and 13 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest:

Regarding claims 2 and 13, the prior art of record fails to specifically disclose said processor resets and reinitializes said decoder in response to said loss in said phase lock.

Regarding claim 7-11, Regarding claim 7, the prior art of record teaches a receiver for receiving an audio file signal (abstract) a decoder for demodulating said audio file signal, a processor for polling said decoder for a loss of a phase lock in said demodulating of

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| said audio file signal (fig. 16, reinitializes said decoder in re | said audio file signal (fig. 16, element 286). However, the prior art of record fails to specifically disclose said processor resets and reinitializes said decoder in response to said loss in said phase lock. | | | |
|---|--|---|---|---|
| US 5,748,046 A (Badger) 5 May 1998, see entire document. US 5,878,336 A (Cashen et al) 2 March 1999, see entire document. US 5,850,415 A (Hunsinger et al) 15 December 1998, see entire document. | | | | |
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